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EXAMINER

RAMAKRISHNAIAH, MELUR

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2614

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/755,812

Applicant(s)

XUE ET AL.

Examiner

Melur Ramakrishnaiah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 and 23-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 and 23-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8-23-04/1-27-05.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10, 11-19, 20, 21-26, are rejected under 35 U.S.C. 103(a) as being unpatentable over Bridges et al. (WO 99/45723, hereinafter Bridges) in view of Guilford et al. (US 2002/0087674 A1, hereinafter Guilford).

Regarding claim 1, Bridges discloses a method of providing mobile data devices in a wireless system with information about preferred networks to connect to, the mobile data device having a preferred roaming list with a list of networks, the method comprising: including information in the preferred roaming list about data capabilities of each network, and determining preferred networks based on the information within the preferred roaming list a geographic area and the data capabilities of the network (page 4, line 24 – page 8, line 24; page 11, line 13 – line 16; page 16, line 19 – page 20, line 21; figs 2A, 2B, 2C, 4).

Regarding claim 11, Bridges discloses a method of providing mobile data devices in a wireless system with information about preferred networks to connect to, the mobile data device having a preferred roaming list with a list of networks, the method comprising: including information in the preferred roaming list about whether each network in the of network supports required service capabilities, and determining preferred networks based on the information within the preferred roaming list including a

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geographic area whether the network supports required service capabilities, whereby within the geographic area, the mobile device prefers those of the networks which support required service capabilities over the which do not support the required service capabilities (page 4, line 24 – page 8, line 24; page 11, line 13 – line 16; page 16, line 19 – page 20, line 21; figs 2A, 2B, 2C, 4).

Regarding claim 20, Bridges discloses a method of providing mobile data devices in a wireless system with information about preferred networks to connect to, the mobile data device having a preferred roaming list with a list of networks, the method comprising: including preferred roaming list information about whether each of the networks in the networks supports required service capabilities, including preferred roaming list information about whether each of the network in the list supports roaming (page 4, line 24 – page 8, line 24; page 11, line 13 – line 16; page 16, line 19 – page 20, line 21; figs 2A, 2B, 2C, 4).

Regarding claim 21, Bridges discloses a system for providing a mobile data device in a wireless system with information about preferred networks to connect to from a list of networks, the system comprising: the mobile data device (68, fig. 2A), the mobile data device being capable of connecting to some or all of networks within the list of networks, and preferred roaming list within the mobile data device, the preferred roaming list including information for each network within the list of networks as shown in tables 1-4, geographic information for each network within the list of networks, information about each network within the list of networks, indicating whether network supports data capability whereby mobile data device chooses a preferred network

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based on the geographic information and those of the networks within the list of networks that support data capability (page 4, line 24 – page 8, line 24; page 11, line 13 – line 16; page 16, line 19 – page 20, line 21; figs 2A, 2B, 2C, 4).

Bridges differs from claims 1,2-4, 5, 6, 10, 11-15, 19, 20, 21, 23-26 in that he does not explicitly teach the following: each of the networks in the list of networks support: third generation data capabilities and determining step prefers those of the networks that support third generation data capabilities over those which do not support third generation data capabilities, data roaming and determining step prefers those of the networks that support data roaming over those of the networks which do not support data roaming, mobile IP service and the determining step prefers those of the networks that support mobile IP services over those of the networks which do not support mobile IP service, always-on feature and the determining step prefers those of the networks that support the always-on feature to those of the networks which do not support the always on feature, information in the preferred roaming list about service capability of the mobile data device, and restricting service requests from the mobile data device based on the data service capability of the device, capability information includes whether device supports a browser.

However, Guilford discloses intelligent network selection based on quality of service and applications over different wireless networks which teaches the following: each of the networks in the list of networks support: third generation data capabilities and determining step prefers those of the networks that support third generation data capabilities (reads on video service) over those which do not support third generation

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data capabilities (paragraph: 0059), data roaming and determining step prefers those of the networks that support data roaming over those of the networks which do not support data roaming, mobile IP service and the determining step prefers those of the networks that support mobile IP services (paragraph: 0006) over those of the networks which do not support mobile IP service, always-on feature and the determining step prefers those of the networks that support the always-on feature to those of the networks which do not support the always on feature, information in the preferred roaming list about service capability of the mobile data device, and restricting service requests from the mobile data device based on the data service capability of the device, capability information includes whether device supports a browser (paragraphs: 7-16; 21-23; 27-28; 45; 51-62; 66-67; 72-73; 79; figs. 2, 4, 7a).

Thus it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Bridges' system to provide for the following: each of the networks in the list of networks support: third generation data capabilities and determining step prefers those of the networks that support third generation data capabilities over those which do not support third generation data capabilities, data roaming and determining step prefers those of the networks that support data roaming over those of the networks which do not support data roaming, mobile IP service and the determining step prefers those of the networks that support mobile IP services over those of the networks which do not support mobile IP service, always-on feature and the determining step prefers those of the networks that support the always-on feature to those of the networks which do not support the always on feature, information in the

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preferred roaming list about service capability of the mobile data device, and restricting service requests from the mobile data device based on the data service capability of the device, capability information includes whether device supports a browser as this arrangement would provide the user to select required service based on his needs as taught by Guilford, thus providing means to meet user needs.

Regarding claims 7-9, 16-18, Bridges teaches the following: service capability information includes whether the device supports: data service, voice service, supports SMS service (Table 2).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 27-28 are rejected under 35 U.S.C 102(b) as being anticipated by Guilford.

Regarding claim 27-28, Guilford discloses a method for a mobile device to acquire a system comprising the steps of: waiting until a new system needs to be acquired, starting a search for a new system, when a new system is acquired, checking the new system against a PRL table to see if the new system supports third generation

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data capabilities (paragraph: 0059) , if the new system supports third generation data capabilities, if the new system does not support third generation capabilities, checking whether any system supports third generation data capabilities, and if so performing the starting and checking steps again, and if the new system does support third generation data capabilities, acquiring the new system, determining whether the new system is the best system if the new system supports third generation data capabilities, and if yes, acquiring the new system, and if no, performing the starting and checking steps again (paragraphs: 6-16; 21-23; 27-28, 51-62; 66-67; 72-73; 70; figs. 2, 4, 7).

5. Claims 29-33, 35, 37-41, 43-44 are rejected under 35 U.S.C 102(e) as being anticipated by Islam et al. (US 2005/0090277A1, filed 10-24-2003, hereinafter Islam).

Regarding claim 29, Islam discloses a method of a mobile data device to determine a network to acquire based on a plurality of system preference criteria stored in the preferred roaming list on the mobile device, the method comprising the steps of: waiting until a new network needs to be acquired, choosing the network to acquire at the mobile data device based on the plurality of system preferences stored in the mobile device, and starting a search for the new network (paragraphs: 0004, 0006, 0012; 0060-0064; figs. 3-4).

Regarding claim 37, Islam discloses a mobile data device for acquiring one of plurality of networks based on plurality of system preference criteria stored in a preferred roaming list on the mobile data device, characterized by means for: waiting until new network needs to be acquired, choosing the network to acquire at the mobile data device (102, fig. 1) based on the plurality of preference criteria stored on the

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mobile device, and starting a search for the new network (paragraphs: 0004, 0006, 0012; 0060-0064; figs. 3-4).

Regarding claims 30-33, 35, 38-41, 43-44, Islam further teaches the following: plurality of system preference criteria includes at least geographic information and data capability information, system preference criteria further includes information about whether each of the available network supports: data roaming for mobile data device (102, fig. 1), mobile IP, an always on device (note mobile device 102 is 3G capable and also prefers 3G network which implies it supports always on, paragraph: 0030), mobile stores a list of service features that mobile devices supports and plurality of system preference criteria that includes a list of services the network supports (paragraph: 0030, 0019, 0042-0043; 0053, 0061-0064), mobile device (102, fig. 1) includes means (120, fig. 1) for storing a list of service features the mobile data device supports and plurality of system preference criteria further includes a list of services the network supports, mobile data device includes means for storing the plurality of system preferences criteria in a table (see table 1) with available networks (paragraphs: 0060-0064).

6. Claims 34, 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Islam in view of Almgren (WO 2004/066663A1, filed 12-3-2003).

Islam differs from claims 34 and 42 in that mobile device gives preference to various ones of the pluralities of system preferences criteria to create a ranking of available networks.

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However, Almgren discloses a roaming method which teaches the following: mobile device gives preference to various ones of the pluralities of system preferences criteria to create a ranking of available networks (reads on creating priority list, see abstract).

Thus it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Islam's system to provide for the following: mobile device gives preference to various ones of the pluralities of system preferences criteria to create a ranking of available networks as this arrangement would facilitate connecting to the network based on the priority/ranking of networks as taught by Almgren, thus facilitating the user to connect to the best available network.

7. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Islam in view of Russell (US 2004/0249915).

Islam differs from claim 36 in that he does not teach the following: choosing step can find no networks are available.

However, Russell teaches the following: choosing step can find no networks are available (fig. 8, paragraph: 0096).

Thus it would have been obvious to one of ordinary skill in the art at the time invention was made to modify Islam's system to provide for the following: choosing step can find no networks are available as this arrangement would facilitates the user to learn the no network is available for connection as taught by Russell, so that user is not kept in darkness as to availability of the network.

Response to Arguments

8. Applicant's arguments filed on 1-13-2006 have been fully considered but they are not persuasive.

Rejection of claims 1-10, 11-19, 20, 21-26, under 35 U.S.C. 103(a) as being over Bridges et al. (WO 99/45723, hereinafter Bridges) in view of Guilford et al. (US 2002/0087674 A1, hereinafter Guilford):

Regarding rejection of independent claims 1, 11, using the above combination of references, Applicant argues "The examiner, however, argues that Guilford discloses intelligent network selection based on third generation capabilities of each network. Applicants respectfully disagree. Guilford discloses a system wherein wireless device is provided with a table that lists preferred networks to be used in roaming, as shown in fig. 4, may specify and group the networks based on whether each network is second generation (2G) or a third generation (3G) network. Guilford does not disclose, however, also including data in the list that would indicate whether a particular 3G network actually support 3G capabilities". Contrary to applicant's interpretation of Guilford reference, Guilford does teach the following: wireless device (12, fig. 2) registering with the network, the network node (56, fig. 2) receiving information regarding the streaming video service from the mobile device, and an algorithm operating on the wireless device 12 references the table and instructs the wireless device to register with 3G wireless network according to the data in the table to obtain video data service. In this manner, wireless device (12) may register with the appropriate network that can handle high-speed data request (paragraph: 0059). This

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clearly reads on applicants claim limitation such as including data in the list that would indicate whether a particular 3G network actually support 3G capabilities. Because Guilford teaches the limitation such including data in the list that would indicate whether a particular 3G network actually support 3G capabilities as explained above, the rejection of claims 1, 11, 20, and 21 under 35 U.S.C 103(a) as being obvious over Bridges in view of Guilford is maintained. Applicant further argues about motivation or suggestion to combine and alleges when 3G data services are needed, the system of Guilford may result in connection to a 3G network that does not support 3G data services. As set forth above when mobile device (12, fig. 2) desires data service such as streaming video, mobile device is connected to 3G network based on data in the table of mobile device (paragraph: 0059). As can be seen from this, Guilford clearly teaches connecting 3G network to meet user need for data service such as streaming video. Since the combination of Bridges and Guilford teaches limitation of claims 1, 11, 20, 21 and their rejection and rejection of dependent claims 2-10, 12-19, and 23-28 are maintained as set forth in the office action above.

Rejection of claims 27 and 28 as being anticipated by Guilford: regarding rejection of the above claims, applicant argues that "There is no explicit or implicit teaching in Guilford to include information in the preferred network list that indicates whether each of 3G network actually support 3G data services or whether the new system that is acquired by the mobile device supports 3G data capabilities". As explained earlier, Guilford does teach the following: wireless device (12, fig. 2) registering with the network, the network node (56, fig. 2) receiving information

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regarding the streaming video service from the mobile device, and an algorithm operating on the wireless device 12 references the table and instructs the wireless device to register with 3G wireless network according to the data in the table to obtain video data service. In this manner, wireless device (12) may register with the appropriate network that can handle high-speed data request (paragraph: 0059). This clearly reads on applicants claim limitation such as information in the preferred network list that indicates whether each of 3G network actually support 3G data services. Since Guilford teaches the limitations of claims 27 and 27, their rejection is maintained.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melur Ramakrishnaiah whose telephone number is (571)272-8098. The examiner can normally be reached on 9 Hr schedule.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Melur Ramakrishnaiah
Primary Examiner
Art Unit 2614